Billing Code: 4910-60-W

## DEPARTMENT OF TRANSPORTATION

**Pipeline and Hazardous Materials Safety Administration** 

[Docket No. PHMSA-2013-0226]

**Improvements in Preparing Oil Spill Facility Response Plans** 

**AGENCY:** Pipeline and Hazardous Materials Safety Administration (PHMSA); DOT.

**ACTION:** Notice; Issuance of Advisory Bulletin.

**Subject:** Conforming Facility Response Plans (FRPs) to Appendix A to Part 194 – "Guidelines for the Preparation of Response Plans" and Identifying Deficiencies.

**SUMMARY:** PHMSA is issuing this advisory bulletin to remind all onshore oil pipeline operators of the circumstances of the Marshall, Michigan, pipeline accident and the need to update FRPs every five years from the date of last submission or the last approval according to its significant and substantial designation. Plans must also be updated whenever new or different operating conditions would affect the implementation of a response plan. (See 49 CFR 194.121.) When updating their FRPs, operators should utilize Appendix A Part 194—Guidelines for the Preparation of Response Plans and submit them electronically to PHMSA.

This bulletin also notifies that FRPs found to meet the requirements of PHMSA's regulations at Part 194 will be posted on PHMSA's website for public viewing. Prior to posting, PHMSA will redact certain information, such as personally identifiable information and certain security related information, in accordance with the Freedom of Information Act and any other applicable Federal law. This document also alerts operators and their plan submitters to common errors in plans that require amendment prior to PHMSA's issuance of approval. Finally, onshore oil

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pipeline operators are encouraged to consider replacing incorporations by reference in their FRPs with a summary of referenced material or a copy of the full document.

**FOR FURTHER INFORMATION CONTACT:** Justin Pryor by phone at 202-366-4595 or by email at justin.pryor@dot.gov. Information about PHMSA may be found at <a href="http://www.phmsa.dot.gov">http://www.phmsa.dot.gov</a>.

## SUPPLEMENTARY INFORMATION:

## I. Background

On Sunday, July 25, 2010, at 5:58 p.m. eastern daylight time, a segment of a 30-inch-diameter pipeline (Line 6B), owned and operated by Enbridge Incorporated (Enbridge), ruptured in a wetland in Marshall, Michigan. The rupture was not discovered or addressed for over 17 hours. During the time lapse, Enbridge twice pumped additional oil (81 percent of the total release) into Line 6B during two startups; the total release was estimated to be 843,444 gallons of crude oil. The oil saturated the surrounding wetlands and flowed into the Talmadge Creek and the Kalamazoo River. Local residents self-evacuated from their homes, and serious environmental damage has required long-term remediation. About 320 people reported symptoms consistent with crude oil exposure. No fatalities were reported. Cleanup and remediation continues, and costs have exceeded \$1 billion.

The National Transportation Safety Board (NTSB) determined that the probable cause of the pipeline rupture was stress corrosion cracking that grew and coalesced from crack and corrosion defects under disbonded polyethylene tape coating. The rupture and prolonged release were caused by pervasive organizational failures at Enbridge that included: (1) deficient integrity

management procedures, which allowed well-documented crack defects in corroded areas to propagate until the pipeline failed; (2) inadequate training of control center personnel, which resulted in Enbridge's failure to recognize the rupture for 17 hours and through two re-starts of the pipeline; and (3) insufficient public awareness and education, which allowed the release to continue for nearly 14 hours after the first notification of an odor to local emergency response agencies.

Furthermore, the NTSB found that a failure to identify and ensure the availability of well-trained emergency responders with sufficient response resources, a lack of regulatory guidance for pipeline facility response planning, and limited oversight of pipeline emergency preparedness led to a deficient FRP that contributed to the severity of the environmental damage and long term consequences.

## II. Advisory Bulletin (ADB-2014-01)

*To:* Owners and Operators of Onshore Oil Pipeline Systems

Subject: Conforming Facility Response Plans to Appendix A to Part 194 – "Guidelines for the Preparation of Response Plans" and Identifying Deficiencies.

Advisory: PHMSA's regulations for FRPs, under §194.115(a), state that "each operator shall identify and ensure, by contract or other approved means, the resources necessary to remove, to the maximum extent practicable, a worst case discharge and to mitigate or prevent a substantial threat of a worst case discharge." Section 194.115(b) goes on to state that "an operator shall identify in the response plan the response resources which are available to respond within the

time specified, after discovery of a worst case discharge, or to mitigate the substantial threat of such a discharge."

The NTSB noted that, because the pipeline safety regulations do not explicitly mandate the amount of resources or recovery capacity required for a worst-case discharge, Enbridge misinterpreted and miscalculated the amount of oil response resources required by §194.115, resulting in a lack of adequate oil spill recovery equipment and resources during the initial response. The NTSB also explained that although Part 194 Appendix A recommends using the United States Coast Guard (USCG) regulations for preparation of FRPs, there was no indication that Enbridge utilized the USCG regulations in the preparation of its FRP.

Section 194.115(a) requires operators to identify in their FRP the resources that are available to respond to a release. PHMSA points operators to Appendix C to 33 CFR part 154 Section 7, "Calculating the Worst Case Discharge Planning Volumes" as the best reference for planning for and ensuring proper response capability. Appendix A of Part 194—"Guidelines for the Preparation of Response Plans" recommends that operators use the USCG regulations for preparation of response plans. To help comply with the identification and assurance of adequate response resources, as noted in the preamble to the Final Rule "Pipeline Safety: Response Plans for Onshore Transportation-Related Oil Pipelines," PHMSA "encourages operators to use USCG-classified oil spill response organizations (OSRO)." An operator contracting with USCG-classified OSROs for response to a worst case discharge will not have to describe the response resources or the response equipment maintenance program of the USCG-classified OSRO to

respond to the spill from wherever the contractor is based to the high volume area and all other areas.

For operators that contract with non-USCG-classified OSRO's, PHMSA uses the USCG guidelines at 33 CFR part 154, Appendix C, along with the USCG planning volume worksheet when it reviews FRPs to confirm sufficiency of response resources and compliance with Part 194.<sup>1</sup>

Section 194.115(b) lists the maximum times allowed for response resources and personnel to arrive at the scene of a rupture. The increments of time are dependent on whether the spill occurs in a high volume area. The NTSB noted that Enbridge's plan erroneously indicated that tiers refer to the size of a spill. Operators are reminded that "high volume area" is defined in \$194.5. The response times that appear in the table at \$194.115(b) correspond with the tiers established by the USCG for a worst-case discharge in the USCG guidance referenced in Appendix A to Part 194.

As stated in a prior advisory bulletin ADB-2010-05 published in the Federal Register on June 28, 2010 (75 FR 36773) operators should review and update their oil spill response plans and contracts to ensure the availability of necessary response resources to a worst case discharge from their pipeline facilities even in the event that more than one significant incident were to occur simultaneously. The NTSB found that during the Marshall, MI, incident, Enbridge's OSROs failed to adequately respond because many of the initial response resources identified in the Enbridge's FRP took over 10 hours to arrive and be deployed at the spill site. Using a

<sup>1</sup> The USCG Planning Volume Worksheet is available at http://www.phmsa.dot.gov/pipeline/library

USCG-classified OSRO to account for response resources can help to reduce equipment information in an FRP and can help PHMSA confirm response capability in terms of resources. Nonetheless, it is the operator's responsibility to ensure that any OSROs listed can respond to the scene of an incident with the appropriate amount of resources and within the times provided in the tiers at §194.115(b).

Additionally, to assist PHMSA in the timely processing and review of FRPs, onshore pipeline operators are encouraged to submit electronic copies of their response plans. PHMSA prefers electronic copies of plans in Portable Document Format over hard copies of plans. Electronic copies can be sent via commercial courier on disc or flash drive to the Office of Pipeline Safety at PHMSA Headquarters' address below:

Office of Pipeline Safety (Attn: Response Plan Review)

Pipeline and Hazardous Materials Safety Administration

U.S. Department of Transportation

PHP-5, East Building, 2<sup>nd</sup> Floor, E22-321

1200 New Jersey Avenue, SE

Washington, DC 20590

Alternatively, electronic files less than 5 MB can be sent to PHMSA.OPA90@dot.gov.

PHMSA also wishes to point out errors that commonly result in the rejection of plans in order to facilitate plan preparation and review. These errors include: 1) missing, incorrect or incomplete

methodology and calculations used to determine a Worst Case Discharge (WCD) that compares the volumes of WCDs from the pipeline, breakout tanks, and maximum historical discharge to include, if necessary, an affirmation that any of these elements are not applicable to the calculation; 2) failure to identify response resources that are available to respond to an incident scene; 3) failure to identify specific environmentally and economically sensitive areas applicable to the pipeline area of operation; 4) missing provisions to ensure responders are safe at a response site; and 5) omission of the name or title and 24-hour telephone number of an operator's "Qualified Individual" and at least one alternate. Deficiencies in any of these areas will require correction before PHMSA can approve a plan. FRPs found to meet the requirements of PHMSA's regulations found at Part 194 will be approved and redacted in accordance with FOIA and any other applicable Federal law and posted on PHMSA's website for public viewing. PHMSA posts these plans to help Federal, state and local officials strengthen and coordinate planning and prevention activities.

Finally, PHMSA advises operators that while it is permitted to incorporate material into an FRP by reference, this practice may inhibit regulators' and incident responders' access to and understanding of an FRP during response to oil spill incidents and emergencies. For example, when responding to a spill, responders and regulators need access to operations, maintenance, and emergency manuals. It is important that all of the potential users of an FRP have immediate access to all relevant information and procedures.

Therefore, operators should review their FRPs and carefully consider each incorporated document and determine whether full copies or summaries of documents should replace the

references. PHMSA suggests operators include the relevant portion of any externally referenced

procedural manual that is required in the FRP, by provisions of 49 CFR part 194. This practice

will also allow PHMSA to more effectively determine that the operator's FRP procedures are

consistent with Part 194 requirements.

**Authority:** 49 U.S.C. chapter 601: 49 CFR 1.53.

Issued in Washington, D.C. on January 22, 2014.

Jeffrey D. Wiese,

Associate Administrator for Pipeline Safety.

[FR Doc. 2014-01515 Filed 01/27/2014 at 8:45 am; Publication Date: 01/28/2014]

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